

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

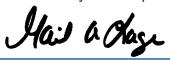
TestAmerica Nashville 2960 Foster Creighton Drive Nashville, TN 37204 Tel: (615)726-0177

TestAmerica Job ID: 490-30544-1 Client Project/Site: Everett Terminal

For:

Exxon Global Remed. Grp 52 Beacham Street Everett, Massachusetts 02149

Attn: Mallory Stanhope



Authorized for release by: 7/24/2013 10:51:42 AM

Gail Lage, Senior Project Manager gail.lage@testamericainc.com

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-30544-1

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Sample Summary

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-30544-1

Lab Sample ID	Client Sample ID	Matrix	Collected Received
490-30544-1	Outfall 01C	Wastewater	07/09/13 08:08 07/10/13 08:30
490-30544-2	Outfall 01C-TSS-1	Wastewater	07/09/13 08:08 07/10/13 08:30
490-30544-5	Trip Blank	Water	07/09/13 08:08 07/10/13 08:30

Case Narrative

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-30544-1

Job ID: 490-30544-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-30544-1

Receipt

The samples were received on 7/10/2013~8:30~AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.8° C.

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Definitions/Glossary

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-30544-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

PQL

QC

RL

RER

RPD TEF

TEQ

Practical Quantitation Limit

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Quality Control

Relative error ratio

Abbreviation	These commonly used abbreviations may or may not be present in this report.
п	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)

Client Sample Results

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

Client Sample ID: Outfall 01C

Date Collected: 07/09/13 08:08

Date Received: 07/10/13 08:30

TestAmerica Job ID: 490-30544-1

Matrix: Wastewater

Lab Sample ID: 490-30544-1

Method: 602 - Purgeable Aro	matics (GC)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.360		1.00	0.360	ug/L			07/11/13 13:49	1
Toluene	0.344	J	1.00	0.330	ug/L			07/11/13 13:49	1
Ethylbenzene	<0.370		1.00	0.370	ug/L			07/11/13 13:49	1
Xylenes, Total	<0.600		3.00	0.600	ug/L			07/11/13 13:49	1
Methyl tert-butyl ether	6.71		1.00	0.460	ug/L			07/11/13 13:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	84		50 - 150			-		07/11/13 13:49	1
Method: 610 - PAHs (HPLC)									

Method: 610 - PAHs (HPLC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.162		0.952	0.162	ug/L		07/12/13 06:57	07/16/13 15:26	1
Acenaphthylene	<0.219		0.952	0.219	ug/L		07/12/13 06:57	07/16/13 15:26	1
Anthracene	< 0.0952		0.952	0.0952	ug/L		07/12/13 06:57	07/16/13 15:26	1
Benzo[a]anthracene	<0.0190		0.190	0.0190	ug/L		07/12/13 06:57	07/16/13 15:26	1
Benzo[a]pyrene	<0.0190		0.0952	0.0190	ug/L		07/12/13 06:57	07/16/13 15:26	1
Benzo[b]fluoranthene	<0.0190		0.0952	0.0190	ug/L		07/12/13 06:57	07/16/13 15:26	1
Benzo[g,h,i]perylene	<0.0190		0.190	0.0190	ug/L		07/12/13 06:57	07/16/13 15:26	1
Benzo[k]fluoranthene	<0.0190		0.133	0.0190	ug/L		07/12/13 06:57	07/16/13 15:26	1
Chrysene	<0.0190		0.0952	0.0190	ug/L		07/12/13 06:57	07/16/13 15:26	1
Dibenz(a,h)anthracene	<0.0286		0.190	0.0286	ug/L		07/12/13 06:57	07/16/13 15:26	1
Fluoranthene	<0.0286		0.190	0.0286	ug/L		07/12/13 06:57	07/16/13 15:26	1
Fluorene	<0.0381		0.476	0.0381	ug/L		07/12/13 06:57	07/16/13 15:26	1
Indeno[1,2,3-cd]pyrene	<0.0381		0.190	0.0381	ug/L		07/12/13 06:57	07/16/13 15:26	1
Naphthalene	< 0.324		0.952	0.324	ug/L		07/12/13 06:57	07/16/13 15:26	1
Phenanthrene	< 0.0476		0.476	0.0476	ug/L		07/12/13 06:57	07/16/13 15:26	1
Pyrene	<0.0286		0.190	0.0286	ug/L		07/12/13 06:57	07/16/13 15:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	78		25 - 135				07/12/13 06:57	07/16/13 15:26	1

General Chemistry								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (HEM)	<1.58	4.52	1.58	mg/L		07/18/13 10:27	07/18/13 10:27	1

Client Sample Results

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-30544-1

Client Sample ID: Outfall 01C-TSS-1

Lab Sample ID: 490-30544-2

Matrix: Wastewater

Date Collected: 07/09/13 08:08 Date Received: 07/10/13 08:30

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	1.20	1.00	0.700 mg/L			07/10/13 17:00	1

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Client Sample Results

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-30544-1

Client Sample ID: Trip Blank

Date Collected: 07/09/13 08:08 Date Received: 07/10/13 08:30 Lab Sample ID: 490-30544-5

Matrix: Water

Method: 602 - Purgeable A	romatics (GC)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.360		1.00	0.360	ug/L			07/11/13 11:39	1
Toluene	<0.330		1.00	0.330	ug/L			07/11/13 11:39	1
Ethylbenzene	<0.370		1.00	0.370	ug/L			07/11/13 11:39	1
Xylenes, Total	<0.600		3.00	0.600	ug/L			07/11/13 11:39	1
Methyl tert-butyl ether	<0.460		1.00	0.460	ug/L			07/11/13 11:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a a a-Trifluorotoluene	91		50 - 150			-		07/11/13 11:39	

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TestAmerica Job ID: 490-30544-1

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

Method: 602 - Purgeable Aromatics (GC)

Lab Sample ID: MB 490-92183/4

Matrix: Water

Matrix: Water

Analysis Batch: 92183

Client Sample ID: Method Blank

Prep Type: Total/NA

-	МВ	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.360		1.00	0.360	ug/L			07/11/13 10:01	1
Toluene	< 0.330		1.00	0.330	ug/L			07/11/13 10:01	1
Ethylbenzene	< 0.370		1.00	0.370	ug/L			07/11/13 10:01	1
Xylenes, Total	<0.600		3.00	0.600	ug/L			07/11/13 10:01	1
Methyl tert-butyl ether	< 0.460		1.00	0.460	ug/L			07/11/13 10:01	1

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 87 50 - 150 07/11/13 10:01 a,a,a-Trifluorotoluene

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 490-92183/2 Prep Type: Total/NA

Analysis Batch: 92183 Snike LCS LCS

•	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	20.0	19.87		ug/L		99	39 - 150
Toluene	20.0	20.48		ug/L		102	46 - 148
Ethylbenzene	20.0	20.71		ug/L		104	32 - 160
Xylenes, Total	60.0	62.00		ug/L		103	66 - 136
Methyl tert-butyl ether	20.0	18.84		ug/L		94	56 - 136

LCS LCS

Surrogate %Recovery Qualifier Limits a,a,a-Trifluorotoluene 92 50 - 150

Lab Sample ID: 490-30544-1 MS Client Sample ID: Outfall 01C **Matrix: Wastewater** Prep Type: Total/NA

Analysis Batch: 92183

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.360		20.0	17.02		ug/L		85	39 - 150	
Toluene	0.344	J	20.0	18.23		ug/L		89	46 - 148	
Ethylbenzene	<0.370		20.0	17.31		ug/L		87	32 - 160	
Xylenes, Total	<0.600		60.0	52.96		ug/L		88	66 - 136	
Methyl tert-butyl ether	6.71		20.0	22.83		ug/L		81	56 - 136	

MS MS Limits Surrogate %Recovery Qualifier a,a,a-Trifluorotoluene 50 - 150 90

Method: 610 - PAHs (HPLC)

Lab Sample ID: MB 490-92436/1-A Client Sample ID: Method Blank

Matrix: Water Prep Type: Total/NA **Analysis Batch: 93161** Prep Batch: 92436

MB MB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Acenaphthene <0.170 1.00 0.170 ug/L 07/12/13 06:57 07/16/13 14:12 Acenaphthylene <0.230 1.00 0.230 ug/L 07/12/13 06:57 07/16/13 14:12 07/16/13 14:12 Anthracene <0.100 1.00 0.100 ug/L 07/12/13 06:57

TestAmerica Nashville

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Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-30544-1

Method: 610 - PAHs (HPLC) (Continued)

Lab Sample ID: MB 490-92436/1-A

Matrix: Water

Analysis Batch: 93161

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 92436

Diriac	
1	
1	
1	 7
1	
1	8
1	

Dil Fac

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzo[a]anthracene	<0.0200		0.200	0.0200	ug/L		07/12/13 06:57	07/16/13 14:12	
Benzo[a]pyrene	<0.0200		0.100	0.0200	ug/L		07/12/13 06:57	07/16/13 14:12	
Benzo[b]fluoranthene	<0.0200		0.100	0.0200	ug/L		07/12/13 06:57	07/16/13 14:12	
Benzo[g,h,i]perylene	<0.0200		0.200	0.0200	ug/L		07/12/13 06:57	07/16/13 14:12	
Benzo[k]fluoranthene	<0.0200		0.140	0.0200	ug/L		07/12/13 06:57	07/16/13 14:12	
Chrysene	<0.0200		0.100	0.0200	ug/L		07/12/13 06:57	07/16/13 14:12	
Dibenz(a,h)anthracene	<0.0300		0.200	0.0300	ug/L		07/12/13 06:57	07/16/13 14:12	
Fluoranthene	<0.0300		0.200	0.0300	ug/L		07/12/13 06:57	07/16/13 14:12	
Fluorene	< 0.0400		0.500	0.0400	ug/L		07/12/13 06:57	07/16/13 14:12	
Indeno[1,2,3-cd]pyrene	<0.0400		0.200	0.0400	ug/L		07/12/13 06:57	07/16/13 14:12	
Naphthalene	<0.340		1.00	0.340	ug/L		07/12/13 06:57	07/16/13 14:12	
Phenanthrene	<0.0500		0.500	0.0500	ug/L		07/12/13 06:57	07/16/13 14:12	
Pyrene	<0.0300		0.200	0.0300	ug/L		07/12/13 06:57	07/16/13 14:12	

Limits

25 - 135

Lab Sample ID: LCS 490-92436/2-A

Matrix: Water

Surrogate

p-Terphenyl

Analysis Batch: 93161

Client Sample ID: Lab Control Sample Prep Type: Total/NA Prep Batch: 92436

Analyzed

07/16/13 14:12

Prepared

07/12/13 06:57

Allalysis Datcil. 93101							Fieb Datcii. 324		
	Spike	LCS	LCS				%Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Acenaphthene	2.50	2.072		ug/L		83	1 - 124		
Acenaphthylene	5.00	4.239		ug/L		85	1 _ 139		
Anthracene	2.50	2.314		ug/L		93	1 - 126		
Benzo[a]anthracene	2.50	2.272		ug/L		91	12 _ 135		
Benzo[a]pyrene	2.50	2.346		ug/L		94	1 _ 128		
Benzo[b]fluoranthene	2.50	2.201		ug/L		88	6 - 150		
Benzo[g,h,i]perylene	2.50	2.180		ug/L		87	1 _ 116		
Benzo[k]fluoranthene	2.50	2.380		ug/L		95	1 - 159		
Chrysene	2.50	2.300		ug/L		92	1 _ 199		
Dibenz(a,h)anthracene	2.50	1.987		ug/L		79	1 _ 110		
Fluoranthene	2.50	2.192		ug/L		88	14 _ 123		
Fluorene	2.50	2.069		ug/L		83	1 _ 142		
Indeno[1,2,3-cd]pyrene	2.50	2.115		ug/L		85	1 - 116		
Naphthalene	2.50	2.035		ug/L		81	1 - 122		
Phenanthrene	2.50	2.204		ug/L		88	1 _ 155		
Pyrene	2.50	2.277		ug/L		91	1 - 140		

LCS LCS

MB MB

%Recovery Qualifier

91

Surrogate %Recovery Qualifier Limits 25 - 135 p-Terphenyl 88

Lab Sample ID: LCSD 490-92436/3-A **Matrix: Water**

Analysis Batch: 93161

Analysis Batch: 93161							Prep	Batch:	92436
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acenaphthene	2.50	1.971		ug/L		79	1 - 124	5	50

TestAmerica Nashville

Prep Type: Total/NA

Client Sample ID: Lab Control Sample Dup

Spike

Added

5.00

2.50

2.50

2.50

2.50

2.50

2.50

2.50

2.50

2.50

2.50

2.50

2.50

2.50

2.50

Limits

LCSD LCSD

3.878

2.237

2.277

2.295

2.193

2.208

2.204

2.312

1.972

2.266

1.937

2.112

2.023

2.157

2.316

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

Result Qualifier

TestAmerica Job ID: 490-30544-1

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

Method: 610 - PAHs (HPLC) (Continued)

Lab Sample ID: LCSD 490-92436/3-A

Matrix: Water

Acenaphthylene

Benzo[a]pyrene

Benzo[a]anthracene

Benzo[b]fluoranthene

Benzo[g,h,i]perylene

Benzo[k]fluoranthene

Dibenz(a,h)anthracene

Indeno[1,2,3-cd]pyrene

Anthracene

Chrysene

Fluorene

Pyrene

Surrogate

Fluoranthene

Naphthalene

Phenanthrene

Analyte

Analysis Batch: 93161

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Prep Batch: 92436

RPD Limits RPD Limit Unit %Rec 78 50 ug/L 1 - 139 9 ug/L 89 1 - 126 3 50 91 12 - 135 ug/L 0 50 ug/L 92 1 - 128 2 50 88 6 - 150 50 ug/L 0 ug/L 88 1 - 116 50

1 _ 159

1 _ 199

1 - 110

14 - 123

1 - 142

1 - 116

1 - 122

1 - 155

1 - 140

88

92

79

91

77

81

86

50

50

50

50

50

50

50

50

8

2

p-Terphenyl	89	25 - 135

LCSD LCSD %Recovery Qualifier

Lab Sample ID: 490-30544-1 MS

Matrix: Wastewater Analysis Batch: 93161

Client Sample ID: Outfall 01C Prep Type: Total/NA Prep Batch: 92436 Sample Sample Spike MS MS %Rec.

Analyte	Result (Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthene	<0.162		2.38	2.022		ug/L		85	1 - 124
Acenaphthylene	<0.219		4.76	4.105		ug/L		86	1 _ 139
Anthracene	<0.0952		2.38	2.162		ug/L		91	1 _ 126
Benzo[a]anthracene	<0.0190		2.38	2.245		ug/L		94	12 - 135
Benzo[a]pyrene	<0.0190		2.38	2.267		ug/L		95	1 - 128
Benzo[b]fluoranthene	<0.0190		2.38	2.177		ug/L		91	6 _ 150
Benzo[g,h,i]perylene	<0.0190		2.38	2.135		ug/L		90	1 _ 116
Benzo[k]fluoranthene	<0.0190		2.38	2.251		ug/L		95	1 _ 159
Chrysene	<0.0190		2.38	2.320		ug/L		97	1 - 199
Dibenz(a,h)anthracene	<0.0286		2.38	2.148		ug/L		90	1 - 110
Fluoranthene	<0.0286		2.38	2.249		ug/L		94	14 - 123
Fluorene	<0.0381		2.38	2.003		ug/L		84	1 - 142
Indeno[1,2,3-cd]pyrene	<0.0381		2.38	2.082		ug/L		87	1 _ 116
Naphthalene	<0.324		2.38	2.139		ug/L		90	1 - 122
Phenanthrene	<0.0476		2.38	2.133		ug/L		90	1 ₋ 155
Pyrene	<0.0286		2.38	2.174		ug/L		91	1 - 140

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
p-Terphenyl	94		25 - 135

TestAmerica Nashville

TestAmerica Job ID: 490-30544-1

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

Lab Sample ID: MB 490-93806/1-A

Matrix: Water

Analysis Batch: 93809

Method: 1664A - HEM and SGT-HEM

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 93806

мв мв Result Qualifier RL MDL Unit D Prepared Dil Fac Analyte Analyzed 4.00 07/18/13 10:27 07/18/13 10:27 Oil & Grease (HEM) <1.40 1.40 mg/L

Lab Sample ID: LCS 490-93806/2-A Client Sample ID: Lab Control Sample **Matrix: Water** Prep Type: Total/NA **Analysis Batch: 93809** Prep Batch: 93806 LCS LCS Spike

Analyte Added Result Qualifier Unit %Rec Limits Oil & Grease (HEM) 41.7 40.00 mg/L 96 78 - 114

Lab Sample ID: LCSD 490-93806/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 93809 Prep Batch: 93806 Spike LCSD LCSD RPD %Rec. Added Result Qualifier Unit D %Rec Limits **RPD** Limit Oil & Grease (HEM) 41.7 39.79 mg/L

Lab Sample ID: 490-30520-P-1-A MS Client Sample ID: Matrix Spike

Matrix: Water Prep Type: Total/NA **Analysis Batch: 93809** Prep Batch: 93806

Sample Sample Spike MS MS %Rec. Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits Oil & Grease (HEM) <1.58 46.5 39.65 mg/L 85 78 - 114

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 490-92091/1 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 92091

MR MR

RL Result Qualifier MDL Unit Prepared Dil Fac Analyte Analyzed Total Suspended Solids <0.700 1 00 0.700 mg/L 07/10/13 17:00

Lab Sample ID: LCS 490-92091/2 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 92091

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit D %Rec Limits **Total Suspended Solids** 101 97.30 mg/L 97 90 - 110

Lab Sample ID: 490-30498-F-4 DU **Client Sample ID: Duplicate Matrix: Water** Prep Type: Total/NA

Analysis Batch: 92091

Sample Sample DU DU RPD Analyte Result Qualifier Result Qualifier Unit D RPD Limit Total Suspended Solids 2.80 2.500 mg/L

QC Sample Results

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-30544-1

Prep Type: Total/NA

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: 490-30512-K-1 DU **Client Sample ID: Duplicate Matrix: Water**

Analysis Batch: 92091

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Total Suspended Solids	0.800	J	0.8000	J	mg/L		 0	20

QC Association Summary

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-30544-1

GC VOA

Analysis Batch: 92183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-30544-1	Outfall 01C	Total/NA	Wastewater	602	
490-30544-1 MS	Outfall 01C	Total/NA	Wastewater	602	
490-30544-5	Trip Blank	Total/NA	Water	602	
LCS 490-92183/2	Lab Control Sample	Total/NA	Water	602	
MB 490-92183/4	Method Blank	Total/NA	Water	602	

HPLC/IC

Prep Batch: 92436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bato
490-30544-1	Outfall 01C	Total/NA	Wastewater	610	
490-30544-1 MS	Outfall 01C	Total/NA	Wastewater	610	
LCS 490-92436/2-A	Lab Control Sample	Total/NA	Water	610	
LCSD 490-92436/3-A	Lab Control Sample Dup	Total/NA	Water	610	
MB 490-92436/1-A	Method Blank	Total/NA	Water	610	

Analysis Batch: 93161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-30544-1	Outfall 01C	Total/NA	Wastewater	610	92436
490-30544-1 MS	Outfall 01C	Total/NA	Wastewater	610	92436
LCS 490-92436/2-A	Lab Control Sample	Total/NA	Water	610	92436
LCSD 490-92436/3-A	Lab Control Sample Dup	Total/NA	Water	610	92436
MB 490-92436/1-A	Method Blank	Total/NA	Water	610	92436

General Chemistry

Analysis Batch: 92091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Bat
490-30498-F-4 DU	Duplicate	Total/NA	Water	SM 2540D
490-30512-K-1 DU	Duplicate	Total/NA	Water	SM 2540D
490-30544-2	Outfall 01C-TSS-1	Total/NA	Wastewater	SM 2540D
LCS 490-92091/2	Lab Control Sample	Total/NA	Water	SM 2540D
MB 490-92091/1	Method Blank	Total/NA	Water	SM 2540D

Prep Batch: 93806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-30520-P-1-A MS	Matrix Spike	Total/NA	Water	1664A	
490-30544-1	Outfall 01C	Total/NA	Wastewater	1664A	
LCS 490-93806/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 490-93806/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 490-93806/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 93809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-30520-P-1-A MS	Matrix Spike	Total/NA	Water	1664A	93806
490-30544-1	Outfall 01C	Total/NA	Wastewater	1664A	93806
LCS 490-93806/2-A	Lab Control Sample	Total/NA	Water	1664A	93806
LCSD 490-93806/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	93806
MB 490-93806/1-A	Method Blank	Total/NA	Water	1664A	93806

TestAmerica Nashville

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Lab Chronicle

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-30544-1

Client Sample ID: Outfall 01C

Date Collected: 07/09/13 08:08 Date Received: 07/10/13 08:30

Lab Sample ID: 490-30544-1

Matrix: Wastewater

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	602		1	92183	07/11/13 13:49	GWM	TAL NSH
Total/NA	Prep	610			92436	07/12/13 06:57	SNR	TAL NSH
Total/NA	Analysis	610		1	93161	07/16/13 15:26	HMT	TAL NSH
Total/NA	Prep	1664A			93806	07/18/13 10:27	BAD	TAL NSH
Total/NA	Analysis	1664A		1	93809	07/18/13 10:27	BAD	TAL NSH

Client Sample ID: Outfall 01C-TSS-1 Lab Sample ID: 490-30544-2

Date Collected: 07/09/13 08:08

Date Received: 07/10/13 08:30

Matrix: Wastewater

Prep TypeTypeMethodRunFactorNumberor AnalyzedAnalystLabTotal/NAAnalysisSM 2540D19209107/10/13 17:00JMRTAL NSH		Batch	Batch		Dilution	Batch	Prepared		
Total/NA Analysis SM 2540D 1 92091 07/10/13 17:00 JMR TAL NSH	Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
		Analysis	SM 2540D		1	92091	07/10/13 17:00	JMR	TAL NSH

Client Sample ID: Trip Blank Lab Sample ID: 490-30544-5

Date Collected: 07/09/13 08:08

Date Received: 07/10/13 08:30

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	602		1	92183	07/11/13 11:39	GWM	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TestAmerica Nashville

Method Summary

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-30544-1

Method	Method Description	Protocol	Laboratory
602	Purgeable Aromatics (GC)	40CFR136A	TAL NSH
610	PAHs (HPLC)	40CFR136A	TAL NSH
1664A	HEM and SGT-HEM	1664A	TAL NSH
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL NSH

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

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TestAmerica Job ID: 490-30544-1

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	ACIL		393	10-30-13
A2LA	ISO/IEC 17025		0453.07	12-31-13
Alaska (UST)	State Program	10	UST-087	07-24-13 *
Arizona	State Program	9	AZ0473	05-05-14
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-13
Connecticut	State Program	1	PH-0220	12-31-13
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-13
lowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-13
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-13
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-15
Nevada	State Program	9	TN00032	07-31-13 *
New Hampshire	NELAP	1	2963	10-10-13
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-13
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	01-19-14
Oklahoma	State Program	6	9412	08-31-13
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-13
South Carolina	State Program	4	84009 (001)	02-28-14
South Carolina	State Program	4	84009 (002)	02-23-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-13
USDA	Federal		S-48469	11-02-13
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-13 *
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-13
Wyoming (UST)	A2LA	8	453.07	12-31-13

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^{*} Expired certification is currently pending renewal and is considered valid.

TestAmerica Nashville



COOLER RECEIPT FORM



490-30544 Chain of Custody

	1-4 1 F
Cooler Received/Opened On7/10/2013 @ 0830	
1. Tracking #(last 4 digits, FedEx)	
Courier:Fedex IR Gun ID96210146	
2. Temperature of rep. sample or temp blank when opened:	
3. If Item #2 temperature is 0° C or less, was the representative sample or temp blank frozen?	YES NO
4. Were custody seals on outside of cooler?	€3NONA
If yes, how many and where:	
5. Were the seals intact, signed, and dated correctly?	€\$NONA
6. Were custody papers inside cooler?	√Ê9NONA
I certify that I opened the cooler and answered questions 1-6 (intial)	
7. Were custody seals on containers: YES (10) and Intact	YESNO. (NA
Were these signed and dated correctly?	YESNONA
8. Packing mat'l used? Bubblewap Plastic bag Peanuts Vermiculite Foam Insert Paper	Other None
9. Cooling process: (ce) Ice-pack Ice (direct contact) Dry ice	Other None
10. Did all containers arrive in good condition (unbroken)?	ESNONA
11. Were all container labels complete (#, date, signed, pres., etc)?	ESNONA
12. Did all container labels and tags agree with custody papers?	YESNONA
13a. Were VOA vials received?	ESNONA
b. Was there any observable headspace present in any VOA vial?	YESNONA
14. Was there a Trip Blank in this cooler? (ESNONA If multiple coolers, sequence	:e#
I certify that I unloaded the cooler and answered questions 7-14 (intial)	
15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level?	YESNO.
b. Did the bottle labels indicate that the correct preservatives were used	YESNONA
16. Was residual chlorine present?	YESNONA
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial)	√ 7
17. Were custody papers properly filled out (ink, signed, etc)?	YESNONA
18. Did you sign the custody papers in the appropriate place?	EsNONA
19. Were correct containers used for the analysis requested?	ESNONA
20. Was sufficient amount of sample sent in each container?	Æ\$NONA
I certify that I entered this project into LIMS and answered questions 17-20 (intial)	<u> </u>
I certify that I attached a label with the unique LIMS number to each container (intial)	P
21. Were there Non-Conformance issues at login? YES(O) Was a NCM generated? YES	NO).#
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Nashville Division

Phone: 615-726-0177

Loc: 490 **30544**



Appendix E

NPDES Permit #MA0000833

Prepared by: EMPCo

Required MLs for Samples from Outfalls 01A and 01C to Accompany Chain of Custody

Polycyclic Aromatic Hydrocarbons	Y
Group I	Permit Required Minimum Level for Analysis, ug/L
Benzo(a)anthracene	<0.05
Benzo(a)pyrene	<0.05
Benzo(b)fluoranthene	<0.05
Benzo(k)fluoranthene	<0.05
Chrysene	<0.5
Dibenzo(a,h)anthracene	<0.10
Indeno(1,2,3-cd)pyrene	<0.10
Group II	Permit Required Minimum Level for Analysis, ug/L
Acenaphthene	<5.00
Acenephthylene	<5.00
Anthracene	<2.0
Benzo(ghi)perylene	<0.2
Fluoranthene	<0.50
Fluorene	<0.5
Naphthalene	<5.00
Phenanthrene	<2.00
Pyrene	<1.00
Other	Permit Required Minimum Level for Analysis, ug/L
Available Cyanide	< 2.00
Total Mercury (Hg)	< 2.00
Methyl Tertiary-Butyl Ether (MTBE)	< 5.00

Loc: 490 30544

Login Sample Receipt Checklist

Client: Exxon Global Remed. Grp Job Number: 490-30544-1

Login Number: 30544 List Source: TestAmerica Nashville

List Number: 1

Creator: Buckingham, Paul

oreator. Duckingham, radi	
Question	Answer Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td>	True
The cooler's custody seal, if present, is intact.	True
Sample custody seals, if present, are intact.	N/A
The cooler or samples do not appear to have been compromised or tampered with.	True
Samples were received on ice.	True
Cooler Temperature is acceptable.	True
Cooler Temperature is recorded.	True
COC is present.	True
COC is filled out in ink and legible.	True
COC is filled out with all pertinent information.	True
Is the Field Sampler's name present on COC?	True
There are no discrepancies between the containers received and the COC.	True
Samples are received within Holding Time.	True
Sample containers have legible labels.	True
Containers are not broken or leaking.	True
Sample collection date/times are provided.	True
Appropriate sample containers are used.	True
Sample bottles are completely filled.	True
Sample Preservation Verified.	N/A
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True
Multiphasic samples are not present.	True
Samples do not require splitting or compositing.	True
Residual Chlorine Checked.	True

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